

for people with moderate to severe conditions. The aim of this research was to estimate the costs of pharmaceuticals to the Australian public health sector and the most frequently prescribed drugs for the three most prevalent mental illnesses: depression, anxiety-related, and substance use disorders. **METHODS:** The National Survey of Mental Health and Wellbeing (NSMHWB) has been conducted every 10 years since 1997, collecting epidemiology and economic impact to Australian society. Respondents diagnosed within the preceding 12 months with depression (D), anxiety-related disorders (ANX), and substance use disorders (SUB) by ICD-10 in NSMHWB 2007 were included in the analysis. The NSMHWB 2007 reported the duration and the name of up to five drugs used during the past 12-month period. In order to adjust for inflation, 2013-14 reference year was adopted for the unit cost of each drug obtained from Pharmaceutical Benefit Scheme (PBS). **RESULTS:** Around 23% of respondents used medications for a total cost to the society of AUD 101 million (SE 11.9). Citalopram was the most frequently prescribed drug (17.11%), followed by venlafaxine (15.65%), sertraline (14.43%), and temazepam (10.51%). Respondents reported with D+ANX+SUB had the highest percentage in use of medications (63.85%), followed by D+ANX (44.26%), and D (34.74%). ANX accounted for 50% of total medication costs followed by D+ANX at 23.6%. **CONCLUSIONS:** The high prevalence of ANX contributed to the large proportion of medication costs for this condition.

PMH22

COST-EFFECTIVENESS ANALYSIS OF ARIPIRAZOLE ONCE-MONTHLY VERSUS PALIPERIDONE PALMITATE IN SPAIN

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OBJECTIVES: Aripiprazole once-monthly (AOM) is a long-acting injectable formulation of aripiprazole, and is approved in Europe for the maintenance treatment of schizophrenia after stabilization with oral aripiprazole. The objective of this research was to evaluate the cost-effectiveness of AOM versus paliperidone palmitate (PP) in the maintenance treatment of schizophrenia in Spain. **METHODS:** This pharmacoeconomic evaluation was conducted alongside a 28-week, randomized, open-label, rater-blinded study comparing AOM 400mg and PP (50-150mg) in stabilized adults with schizophrenia. Effectiveness outcomes of the cost-effectiveness analyses (CEA) included the changes in Heinrichs-Carpenter Quality of Life Scale (QLS-primary CEA) and Clinical Global Impression-Severity (CGI-S) score at week 28. Visits with healthcare providers, out- and in-patient services were collected using a health economic assessment questionnaire (HEA). Healthcare services unit costs from the Basque Country were used (2014 costs). All patients with at least one valid post-baseline HEA were eligible for analysis. Bootstrapped confidence intervals were generated from 10,000 simulations, as well as cost-effectiveness acceptability curves. **RESULTS:** Over the total 28-week period, AOM was associated with significantly reduced total healthcare costs compared to PP (mean per-patient cost: €1,935 vs. €2,475, respectively; $p < 0.001$). This cost reduction was primarily due to significant reduction in drug acquisition costs (€1,237 vs. €1,889; $p < 0.001$). The other cost aggregates (healthcare provider costs, out- and in-patient costs) were not statistically different between drugs ($p = 0.528$, $p = 0.102$ and $p = 0.194$, respectively). In the primary CEA, AOM dominated PP (being more effective on the QLS scale and less costly). This result was confirmed when using CGI-S as effectiveness measure. The cost-effectiveness acceptability curves indicated that AOM was the treatment of choice whatever willingness-to-pay threshold used. **CONCLUSIONS:** Aripiprazole once-monthly was associated with statistically significantly reduced healthcare costs and greater effectiveness compared to paliperidone palmitate in all scenarios, showing its economic value in the management of maintenance schizophrenia in Spain.

PMH23

COST-EFFECTIVENESS ANALYSIS OF THE INFORMATION TECHNOLOGY AIDED RELAPSE PREVENTION PROGRAMME IN SCHIZOPHRENIA (ITAREPS) IN THE CZECH REPUBLIC

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OBJECTIVES: Information technology aided relapse prevention programme in schizophrenia (ITAREPS) is a unique mobile phone-based telemedicine solution for weekly remote patient monitoring and disease management of psychotic disorders in general, particularly of schizophrenia. RCTs evidence suggests that ITAREPS is highly effective in decreasing hospitalization schizophrenia relapses. Based on these RCTs, we performed a cost-utility analysis of ITAREPS compared to the treatment of schizophrenia without ITAREPS in the Czech Republic. **METHODS:** We developed a 20-year Markov cohort model with yearly cycle length and four health states, i.e. without relapse, with non-hospitalization relapse, with hospitalization relapse and death. Transition probabilities and resource use were derived from the Czech RCT and utilities were derived from published literature. Costs were calculated from healthcare payer's perspective. Costs and outcomes were discounted by 3%. Probabilistic sensitivity analysis (PSA) with 3000 iterations was performed. **RESULTS:** Over a 20-year time horizon, ITAREPS compared to non-ITAREPS brings additional 0.21 QALY (12.33 vs. 12.12). The incremental total costs were -€5,554 (€55,435 vs. €60,989) for ITAREPS. The insignificantly higher costs of ITAREPS service itself (€155 in the first and €120 in subsequent years) are therefore vastly offset by savings of hospitalization relapse costs (€1,243 vs. €11,748); ITAREPS on average prevents 5 hospitalization relapses in 20-year time horizon (0.73 vs. 5.77 hospitalizations) per patient. The results of the PSA show that ITAREPS is cost-effective in 93% iterations under the WTP threshold equal to €0. An extensive scenario analysis confirmed the base-case results, ITAREPS was dominant in all scenarios. **CONCLUSIONS:** ITAREPS is a highly cost-effective intervention in patients with schizophrenia and it is even a dominant intervention in comparison with non-ITAREPS since it is more effective in terms of QALY gained and cheaper at the same time. There is even 93% probability of ITAREPS being cost-effective at the WTP threshold equal to €0.

PMH24

STUDY ON COST-EFFECTIVENESS ANALYSIS FOR TREATMENT OF MAJOR DEPRESSION DISEASE: A SYSTEMATIC REVIEW OF LITERATURE FROM 2004-2014

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OBJECTIVES: Ministry of Health, Labour and Welfare of Japan aims for the introduction of Health Technology Assessment in FY2016. Compared to foreign countries, a lack of resources for conducting the analysis has been pointed out in Japan. However, pharmaceutical and medical device industries are urged to seek practical approaches utilizing best available resources. The objective of this study was to review articles for cost-effectiveness analysis of major depression disease (MDD) and to evaluate analytical approaches that can be applied to Japanese environment. **METHODS:** The literature search was conducted in MEDLINE and JDream III. Inclusion criteria are studies of 1) treatment for MDD, 2) cost-effectiveness analysis (CEA), 3) published in the past 10 years. Studies were assessed for the followings: country, model structure and simulation method, time horizon, perspective, source of key parameters, results, and key drivers determined from sensitivity analysis. **RESULTS:** Twenty-three studies were reviewed in details. Markov (6 articles) and decision-tree (8 articles) models were adopted, and time horizon were relatively short, ranging from 8 weeks to 5 years. Thirteen studies included costs of productivity loss. Costs were based on literature or expert opinion in 21 studies. Utility scores were referred to other studies (17 articles). Parameters which became key drivers for these analyses varied among studies. **CONCLUSIONS:** Data collection methods adopted in prior studies were considered applicable to CEA for UC treatment in Japan. Cost data can be obtained not only from questionnaire survey to doctors but commercial database. Because evidence on utility scores of Japanese population is still limited, further studies will be needed, especially on MDD patients in depression, remission, and relapse phase of treatment.

PMH25

ECONOMIC ANALYSIS OF PALIPERIDONE LONG-ACTING ACTING INJECTABLE FOR CHRONIC SCHIZOPHRENIA IN PORTUGAL

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OBJECTIVES: Patients with chronic schizophrenia are difficult to manage and costly to the health system. The European Medicines Agency has approved paliperidone palmitate (PP-LAI; Xeplion®), an atypical antipsychotic depot which is administered monthly. However, its pharmacoeconomic profile in Portugal is unknown. Therefore, we conducted a cost-effectiveness analysis from the analytic viewpoint of the Portuguese National Health Service. **METHODS:** PP-LAI was compared with long acting injectable forms of risperidone (RIS-LAI) and haloperidol (HAL-LAI) as well as oral drugs (oral-OLZ) using a 1-year decision tree previously used in Europe and adapted to Portugal with guidance from clinical experts. We obtained clinical information and costs from literature sources and published lists. Clinical outcomes included relapses (both requiring and not requiring hospitalization), days with relapse, and quality-adjusted life-years (QALYs). Costs were expressed in 2015 euros. Economic outcomes included a cost-utility (incremental cost/QALY) and cost-effectiveness analyses (incremental cost/relapse as well as hospitalization avoided). **RESULTS:** PP-LAI had the lowest rates for all negative events. Respective outcomes for PP-LAI, RIS-LAI, HAL-LAI and oral-OLZ included relapse days (37.4, 51.2, 79.5, 78.0), Emergency Room visits (0.122, 0.168, 0.250, 0.242), hospitalizations (0.288, 0.394, 0.623, 0.615) and QALYs (0.8227, 0.7985, 0.7585, 0.7609). Expected costs were lowest for oral-OLZ (4447€), followed by 4474€ for HAL-LAI, 5326€ for PP-LAI, and 6223€ for RIS-LAI. HAL-LAI and RIS-LAI were both dominated and eliminated from further consideration. PP-LAI had an ICER of 14,247€/QALY gained over oral-OLZ, which was considerably below the NICE threshold (~27,600€). In cost-effectiveness analyses, PP-LAI had ICERs of 1902€/relapse avoided and 2626€/hospitalization avoided. Model drivers were hospitalization for HAL-LAI (74%) and oral-OLZ (59%); for PP-LAI 49% was due to drug and 39% hospitalization and for RIS-LAI it was 44% drug and 44% hospitalization. **CONCLUSIONS:** PP-LAI is cost-effective in Portugal when compared with the customary treatments.

PMH26

PHARMACOECONOMIC EVALUATION OF ARIPIRAZOLE ONCE-MONTHLY VERSUS PALIPERIDONE PALMITATE IN THE UK: FINDINGS FROM QUALIFY

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OBJECTIVES: As a chronic illness, schizophrenia consumes a vast amount of healthcare resources and is therefore associated with both high direct and indirect healthcare costs. Pervasive suboptimal quality of life coupled with a high economic burden renders policy and healthcare decision makers seeking cost-effective treatments. This study aimed at evaluating the cost-effectiveness of aripiprazole once-monthly 400mg (AOM) versus paliperidone palmitate 50-150mg (PP) in the maintenance treatment of schizophrenia based on the QUALIFY study (NCT01795547). **METHODS:** QUALIFY was a 28-week, randomised, open-label, rater-blinded study comparing AOM with PP in the maintenance treatment of schizophrenia. Two key outcomes demonstrated improvements for AOM vs. PP: Heinrichs-Carpenter Quality of Life Scale (QLS) and Clinical Global Impression – Severity (CGI-S). To assess cost-effectiveness, minimal clinically important differences (MCIDs) were sought from the literature in the respective assessment scales. Treatment response was defined as a change from baseline to study termination of at least 6 points and 1 point on QLS total score and CGI-S score, respectively. Mean treatment specific costs (incl. drug acquisition) were estimated using QUALIFY healthcare resource utilisation data. The analysis was conducted from a UK perspective considering direct costs only. **RESULTS:** In the deterministic analysis mean total costs per-patient were £2,093 and £2,954 for AOM and PP, respectively